TOWN OF WARRENTON

POST OFFICE DRAWER 341
WARRENTON, VIRGINIA 20188-0341
www.warrentonva.gov
TELEPHONE (540) 347-1101
FAX (540) 349-2414
TDD 1-800-828-1120

October 27, 2015

Douglas Frasier
VPDES Permit Writer, Senior II
Commonwealth of Virginia
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Re: VPDES Permit No. VA0021172
Town of Warrenton Wastewater Treatment Plant
Fauquier County

Dear Mr. Frasier:

Per your conversation with Allen Chichester, Wastewater Plant Superintendent, the VPDES Sewage Sludge Permit Application has been corrected. I have signed the new application and enclosed it for your review. Please include it with the previous submittal forms dated October 22, 2015.

Should you have any questions, please feel free to contact me.

Sincerely,

Edward B. Tucker, Jr.
Director of Public Works and Utilities

/jm
Enclosures
cc: Allen G. Chichester

VPDES Sewage Sludge Permit Application for Permit Reissuance

Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.
Part 1 is general information to be provided by all facilities.
Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.
Part 3 must be completed by all facilities that land apply Class B biosolids.

Part 1 – Sludge Disposal Management (To be completed by all facilities)

Facility Name: Town of Warrenton **VPDES Permit No:** VA0021172

1. Shipment Off Site for Treatment or Blending

Is sewage sludge from your facility sent to another facility that provides treatment or blending? ☐ Yes ☑ No

If you send sewage sludge to more than one facility, attach additional sheets as necessary.

Shipment off site is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Receiving Facility Name _____

b. Receiving Facility VPDES Permit No. _____

c. Include an acceptance letter from the Receiving Facility.

d. Receiving Facility's ultimate disposal method for sewage sludge _____

2. Disposal in a Municipal Solid Waste Landfill

Is sewage sludge from your facility placed in a municipal solid waste landfill? ☐ Yes ☑ No

If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

Landfilling is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Landfill Name _____

b. Landfill Permit No. _____

c. Include an acceptance letter from the landfill.

3. Incineration

Is sewage sludge from your facility fired in a sewage sludge incinerator? ☐ Yes ☑ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ☐ Yes ☑ No

If yes, provide the Air Registration No. _____

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name _____

c. Air Registration No. _____

d. Include an acceptance letter from the Incinerator.

4. Class A Biosolids

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2. ☐ Yes ☑ No

Are Class A biosolids from your facility land applied in bulk? ☐ Yes ☑ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the VDACS certification number? ☐ Yes ☑ No

_____

5. Class B Biosolids

Do you produce Class B biosolids? If yes, complete Part 2. ☑ *Yes* ☐ *No*

Are Class B biosolids from your facility land applied land applied under the authorization of this VPDES Permit? If yes, complete Part 3. ☐ *Yes* ☑ *No*

6. Land Application Under a Separate Permit

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit? ☑ Yes ☐ No

Biosolids are land applied under the authorization of a ☑ VPA permit ☐ Another VPDES Permit ☐ Out of State

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name: Synagro Central, LLC

b. Permit No.: VPA00062

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9VAC25-31-530 F.

VPDES Sewage Sludge Permit Application for Permit Reissuance

Part 2 – Biosolids Characterization (To be completed by all facilities that generate biosolids that are land applied.)

1. Have there been changes to sludge treatment processes or storage facilities since the previous permit issuance/reissuance? ☐ Yes ☑ No
2. Do the biosolids generated under this permit that will be land applied meet one of the Class A pathogen requirements in 9VAC25-31-710 A 3 through A 8 or Class B pathogen requirements in 9VAC25-31-710 B 1 through B 4? ☑ Yes ☐ No

   Identify the pathogen reduction option utilized to demonstrate compliance with the pathogen reductions requirements and provide the data that demonstrate compliance with the applicable alternative. _____
3. Do the biosolids generated under this permit that will be land applied meet one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 10? ☑ Yes ☐ No

   Identify the vector attraction reduction option utilized to demonstrate compliance with the vector attraction reductions requirements and provide the data that demonstrate compliance with the applicable alternative. _____
4. Do the biosolids to be land applied meet the ceiling/pollutant concentrations in 9VAC25-31-540 B? ☑ Yes ☐ No
5. Has data from the most recent 3 samples for pH (S.U.), Percent Solids (%), Ammonium Nitrogen (mg/kg), Nitrate Nitrogen (mg/kg), Total Kjeldahl Nitrogen (mg/kg), Total Phosphorus (mg/kg), Total Potassium (mg/kg), Alkalinity as $CaCO_3$ (mg/kg), Arsenic (mg/kg), Cadmium (mg/kg), Copper (mg/kg), Lead (mg/kg), Mercury (mg/kg), Nickel (mg/kg), Selenium (mg/kg), Zinc (mg/kg) been submitted to DEQ? The samples shall be no more than 4½ years old and each sampling date shall be at least 1 month apart. ☑ Yes ☐ No

   If no, provide the data with this application.

Part 3 – Land Application of Class B Biosolids (To be completed by all facilities that land apply Class B biosolids.)

1. Provide to DEQ and to each locality in which biosolids are to be land applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with 9VAC25-31-100 P 9.
2. For each site, provide a properly completed landowner agreement for each landowner, using the most current Land Application Agreement - Biosolids Form (VPDES Sewage Sludge Permit Application Form – Attachment to Section C).
3. Are any new land application fields proposed at this reissuance? ☐ Yes ☐ No

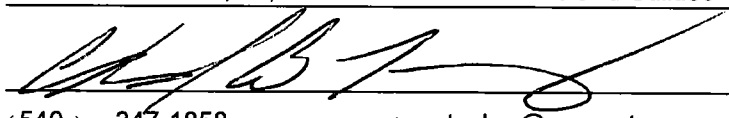
   If yes, contact the DEQ Regional Office for additional submittal requirements.
4. For the currently permitted land application fields, are the previously submitted site booklets, maps and acreage accurate. ☐ Yes ☐ No

   If no, contact the DEQ Regional Office for additional submittal requirements.
5. Does the facility's Biosolids Management Plan on file with DEQ include the following minimum information? ☐ Yes ☐ No
   a. An odor control plan that addresses the abatement of odors resulting from the storage and/or land application of biosolids.
   b. A description of the transport vehicles to be used.
   c. Procedures for biosolids offloading at the land application site including spill prevention, cleanup (including vehicle cleaning), field reclamation, and emergency notification and cleanup measures.
   d. A description of the land application equipment including procedures for calibrating equipment to ensure uniform distribution and appropriate loading rates.
   e. Procedures used to ensure that land application activities address notification requirements, signage requirements, slope restrictions, operation limitations during periods of inclement weather, soil pH requirements, buffer zone requirements, and site restrictions.
   f. Any other information necessary to ensure compliance with the requirements of the Biosolids Program of the VPDES Permit Regulation (9VAC25-31-420 through 720).

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Edward B. Tucker, Jr., Director of Public Works and Utilities

Signature: 

Telephone number / Email: (540) 347-1858 / etucker@warrentonva.gov

Date signed: 10/27/15

(Based on a review of this information, it may be necessary to submit additional information to meet other legal or technical review requirements.)

VPDES Sewage Sludge Permit Application for Permit Reissuance

Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.
Part 1 is general information to be provided by all facilities.
Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.
Part 3 must be completed by all facilities that land apply Class B biosolids.

Part 1 – Sludge Disposal Management (To be completed by all facilities)

Facility Name: Town of Warrenton **VPDES Permit No:** VA0021172

1. Shipment Off Site for Treatment or Blending

Is sewage sludge from your facility sent to another facility that provides treatment or blending? ☐ Yes ☑ No

If you send sewage sludge to more than one facility, attach additional sheets as necessary.

Shipment off site is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Receiving Facility Name _____

b. Receiving Facility VPDES Permit No. _____

c. Include an acceptance letter from the Receiving Facility.

d. Receiving Facility's ultimate disposal method for sewage sludge _____

2. Disposal in a Municipal Solid Waste Landfill

Is sewage sludge from your facility placed in a municipal solid waste landfill? ☐ Yes ☑ No

If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

Landfilling is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Landfill Name _____

b. Landfill Permit No. _____

c. Include an acceptance letter from the landfill.

3. Incineration

Is sewage sludge from your facility fired in a sewage sludge incinerator? ☐ Yes ☑ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ☐ Yes ☑ No

If yes, provide the Air Registration No. _____

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name _____

c. Air Registration No. _____

d. Include an acceptance letter from the Incinerator.

4. Class A Biosolids

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2. ☐ Yes ☑ No

Are Class A biosolids from your facility land applied in bulk? ☐ Yes ☑ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the VDACS certification number? ☐ Yes ☑ No _____

5. Class B Biosolids

Do you produce Class B biosolids? If yes, complete Part 2. ☑ *Yes* ☐ *No*

Are Class B biosolids from your facility land applied land applied under the authorization of this VPDES Permit? If yes, complete Part 3. ☑ *Yes* ☐ *No*

6. Land Application Under a Separate Permit

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit? ☐ Yes ☑ No

Biosolids are land applied under the authorization of a ☐ VPA permit ☐ Another VPDES Permit ☐ Out of State

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name _____ b. Permit No. _____

_____ _____

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9VAC25-31-530 F.

VPDES Sewage Sludge Permit Application for Permit Reissuance

Part 2 – Biosolids Characterization (To be completed by all facilities that generate biosolids that are land applied.)

1. Have there been changes to sludge treatment processes or storage facilities since the previous permit issuance/reissuance? ☐ Yes ☑ No
2. Do the biosolids generated under this permit that will be land applied meet one of the Class A pathogen requirements in 9VAC25-31-710 A 3 through A 8 or Class B pathogen requirements in 9VAC25-31-710 B 1 through B 4? ☑ Yes ☐ No

   Identify the pathogen reduction option utilized to demonstrate compliance with the pathogen reductions requirements and provide the data that demonstrate compliance with the applicable alternative. _____
3. Do the biosolids generated under this permit that will be land applied meet one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 10? ☑ Yes ☐ No

   Identify the vector attraction reduction option utilized to demonstrate compliance with the vector attraction reductions requirements and provide the data that demonstrate compliance with the applicable alternative. _____
4. Do the biosolids to be land applied meet the ceiling/pollutant concentrations in 9VAC25-31-540 B? ☑ Yes ☐ No
5. Has data from the most recent 3 samples for pH (S.U.), Percent Solids (%), Ammonium Nitrogen (mg/kg), Nitrate Nitrogen (mg/kg), Total Kjeldahl Nitrogen (mg/kg), Total Phosphorus (mg/kg), Total Potassium (mg/kg), Alkalinity as $CaCO_3$ (mg/kg), Arsenic (mg/kg), Cadmium (mg/kg), Copper (mg/kg), Lead (mg/kg), Mercury (mg/kg), Nickel (mg/kg), Selenium (mg/kg), Zinc (mg/kg) been submitted to DEQ? The samples shall be no more than 4½ years old and each sampling date shall be at least 1 month apart. ☑ Yes ☐ No

   If no, provide the data with this application.

Part 3 – Land Application of Class B Biosolids (To be completed by all facilities that land apply Class B biosolids.)

1. Provide to DEQ and to each locality in which biosolids are to be land applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with 9VAC25-31-100 P 9. (See Attachment 1 to Part 3)
2. For each site, provide a properly completed landowner agreement for each landowner, using the most current Land Application Agreement - Biosolids Form (VPDES Sewage Sludge Permit Application Form – Attachment to Section C).
3. Are any new land application fields proposed at this reissuance? ☐ Yes ☑ No

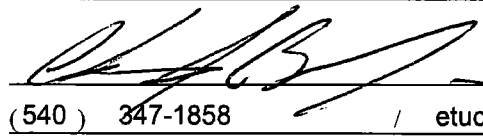
   If yes, contact the DEQ Regional Office for additional submittal requirements.
4. For the currently permitted land application fields, are the previously submitted site booklets, maps and acreage accurate. ☐ Yes ☑ No

   If no, contact the DEQ Regional Office for additional submittal requirements.
5. Does the facility's Biosolids Management Plan on file with DEQ include the following minimum information? ☐ Yes ☑ No
   a. An odor control plan that addresses the abatement of odors resulting from the storage and/or land application of biosolids.
   b. A description of the transport vehicles to be used.
   c. Procedures for biosolids offloading at the land application site including spill prevention, cleanup (including vehicle cleaning), field reclamation, and emergency notification and cleanup measures.
   d. A description of the land application equipment including procedures for calibrating equipment to ensure uniform distribution and appropriate loading rates.
   e. Procedures used to ensure that land application activities address notification requirements, signage requirements, slope restrictions, operation limitations during periods of inclement weather, soil pH requirements, buffer zone requirements, and site restrictions.
   f. Any other information necessary to ensure compliance with the requirements of the Biosolids Program of the VPDES Permit Regulation (9VAC25-31-420 through 720).

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Edward B. Tucker, Jr., Director of Public Works and Utilities

Signature: 

Telephone number / Email: (540) 347-1858 / etucker@warrentonva.gov

Date signed: 10-22-15

(Based on a review of this information, it may be necessary to submit additional information to meet other legal or technical review requirements.)

TOWN OF WARRENTON

POST OFFICE DRAWER 341
WARRENTON, VIRGINIA 20188-0341
www.warrentonva.gov
TELEPHONE (540) 347-1101
FAX (540) 349-2414
TDD 1-800-828-1120

October 22, 2015

Douglas Frasier
VPDES Permit Writer, Senior II
Commonwealth of Virginia
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Re: VPDES Permit No. VA0021172
Town of Warrenton Wastewater Treatment Plant
Fauquier County

Dear Mr. Frasier:

Please find enclosed the required permit renewal application forms and attachments for the Town of Warrenton Wastewater Treatment Plant permit which expires on April 26, 2016. As requested, I have also emailed an electronic copy of all application documents and attachments.

Should you have any questions or need clarification, please feel free to contact me at 540-347-1858 or by email at etucker@warrentonva.gov or you may contact Allen G. Chichester, Wastewater Superintendent, at 540-347-1104 or by email at achichester@warrentonva.gov.

Sincerely,

Edward B. Tucker, Jr.
Director of Public Works and Utilities

/jm
Enclosures
cc: Allen G. Chichester

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Virginia Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9VAC25-31-290.C.2.

Agent/Department to be billed: Edward B. Tucker, Jr.

Owner: Town of Warrenton

Applicant's Address: P.O. Drawer 341

Warrenton, VA 20188

Agent's Telephone Number: 540-347-1858

Authorizing Agent: _____
Signature

VPDES Permit No. VA0021172
Town of Warrenton Wastewater Treatment Plant

Please return to:

Douglas Frasier
VA-DEQ, NRO
13901 Crown Court
Woodbridge, VA 22193-1453
Fax: 703-583-3821

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Town of Warrenton Wastewater Treatment Plant

Mailing Address: P.O. Drawer 341, Warrenton, VA 20188

Contact person: Allen Chichester

Title: Wastewater Superintendent

Telephone number: (540) 347-1104

Facility Address (not P.O. Box): 731 Frost Avenue, Warrenton, VA 20186

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: Town of Warenton

Mailing Address: P.O. Drawer 341, Warrenton, VA 20188

Contact person: Edward B. Tucker, Jr.

Title: Director of Public Works and Utilities

Telephone number: (540) 347-1858

Is the applicant the owner or operator (or both) of the treatment works?

✓ owner _____ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

_____ facility ✓ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	VA0021172	PSD	N/A
UIC	N/A	Other	VAN020028 Total Nitrogen & Phosphorus
RCRA	N/A	Other	VAR040124 MS4 General Permit

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Town of Warrenton	9907	Separate	Municipality
Fauquier County	1925	Separate	County
Warrenotn Training Center	1000	Separate	U.S. Government
Total population served	12832		

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes ✓ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes ✓ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 2.5 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	2.03	2.01	1.85	mgd
c. Maximum daily flow rate	3.27	3.36	2.68	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

✓ Separate sanitary sewer 100 %

_____ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ✓ Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent One

ii. Discharges of untreated or partially treated effluent _____

iii. Combined sewer overflow points _____

iv. Constructed emergency overflows (prior to the headworks) _____

v. Other _____ _____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? _____ Yes ✓ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c. Does the treatment works land-apply treated wastewater? _____ Yes ✓ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? _____ Yes ✓ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

_____

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes ✓ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number: 001

b. Location:
Town of Warrenton (City or town, if applicable) — 20186 (Zip Code)
Fauquier (County) — VA (State)
38 degrees 43 min. 00 sec. (Latitude) — 77 degrees 48 min. 57 sec. (Longitude)

c. Distance from shore (if applicable): N/A ft.

d. Depth below surface (if applicable): N/A ft.

e. Average daily flow rate: _____ mgd

f. Does this outfall have either an intermittent or a periodic discharge? _____ Yes ✓ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: _____

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? _____ Yes ✓ No

A.10. Description of Receiving Waters.

a. Name of receiving water: Cemetery Run a Tributary of Great Run

b. Name of watershed (if known): Rappahannock River Basin

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin (if known): Rappahannock River Basin

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of $CaCO_3$

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

✓ Primary ✓ Secondary

✓ Advanced ✓ Other. Describe: Chemical addition (coagulation)

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	96	%
Design SS removal	96	%
Design P removal	N/A	%
Design N removal	N/A	%
Other NH3	95	%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Ultraviolet Light

If disinfection is by chlorination, is dechlorination used for this outfall? ✓ Yes ____ No

d. Does the treatment plant have post aeration? ✓ Yes ____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.1	s.u.			
pH (Maximum)	7.9	s.u.			
Flow Rate	2.48	MGD	1.78	MGD	3
Temperature (Winter)	10.7	°C	10.2	°C	3
Temperature (Summer)	25.3	°C	24.3	°C	3

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5	N/A						
DEMAND (Report one)	CBOD-5	8	mg/l	1.5	mg/l	3	SM5210B-2011	
FECAL COLIFORM		N/A						
TOTAL SUSPENDED SOLIDS (TSS)		2.2	mg/l	1.0	mg/l	3	SM2540D-2011	

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

950,000* gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

In 2015, the Town completed an evaluation of the water/sewer commitments and system assets. Based on study results (with increased I&I), the Town is programming additional remediation measures to reduce I&I during the permit period.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) (See Attachment to Part B, B.2.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. (See Attachment to Part B, B.3.)

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes ✓ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

✓ Yes ____No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

_____

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	___/___/_____	___/___/_____
– End construction	___/___/_____	___/___/_____
– Begin discharge	___/___/_____	___/___/_____
– Attain operational level	___/___/_____	___/___/_____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ____Yes ____No

Describe briefly: _____

_____

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0.3	mg/l	.03	mg/l	3	SM4500-NH3D-2011	
CHLORINE (TOTAL RESIDUAL, TRC)	N/A						
DISSOLVED OXYGEN	10.7	mg/l	10.2	mg/l	3	YSI Model 58	
TOTAL KJELDAHL NITROGEN (TKN)	1.58	mg/l	1.05	mg/l	3	SM-4500NH3C-2011	
NITRATE PLUS NITRITE NITROGEN	3.35	mg/l	2.12	mg/l	3	SM-4500NO3F-2011	
OIL and GREASE	N/A						
PHOSPHORUS (Total)	.12	mg/l	.06	mg/l	3	SM-4500-PE-2011	
TOTAL DISSOLVED SOLIDS (TDS)	N/A						
OTHER Escherichia Coli			1	MPN	3	Colilert-18	

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

✓ Basic Application Information packet

Supplemental Application Information packet:

✓ Part D (Expanded Effluent Testing Data)

✓ Part E (Toxicity Testing: Biomonitoring Data)

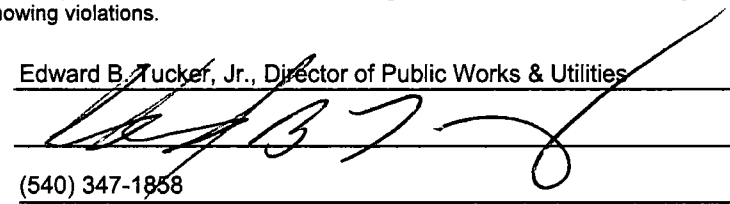
____ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Edward B. Tucker, Jr., Director of Public Works & Utilities

Signature: 

Telephone number: (540) 347-1858

Date signed: 10-22-15

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old. See Attachment 1, Part D

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS $CaCO_3$)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:
Town of Warrenton - VA0021172

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests. See Attachment 1, Part E

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

___Yes ✓ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

100% chronic ceriodaphnia dubia
100% chronic pimephales promelas

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

____Yes____No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

_____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

_____

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ____Yes ____No

b. Categorical pretreatment standards ____Yes ____No

If subject to categorical pretreatment standards, which category and subcategory?

_____

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes____No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ___No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ____No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

a. All CSO discharge points.

b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).

c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

a. Locations of major sewer trunk lines, both combined and separate sanitary.

b. Locations of points where separate sanitary sewers feed into the combined sewer system.

c. Locations of in-line and off-line storage structures.

d. Locations of flow-regulating devices.

e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

a. Outfall number _____

b. Location

_____ _____
(City or town, if applicable) (Zip Code)

_____ _____
(County) (State)

_____ _____
(Latitude) (Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Which of the following were monitored during the last year for this CSO?

____Rainfall ____CSO pollutant concentrations ____CSO frequency

____CSO flow volume ____Receiving water quality

f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

a. Give the number of CSO events in the last year.

_____ events (___ actual or ___ approx.)

b. Give the average duration per CSO event.

_____ hours (____ actual or ____ approx.)

c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

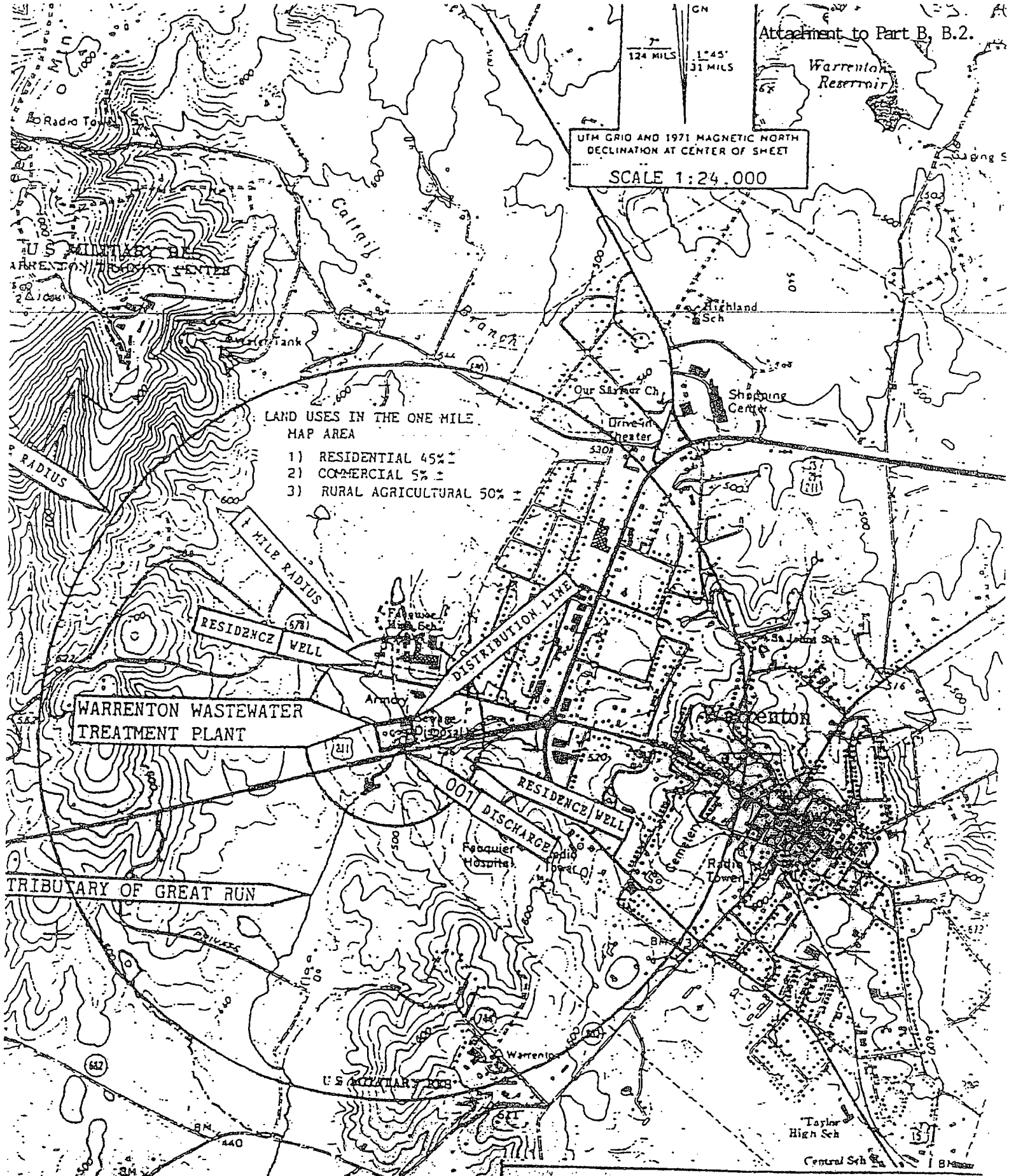
G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

_____

_____

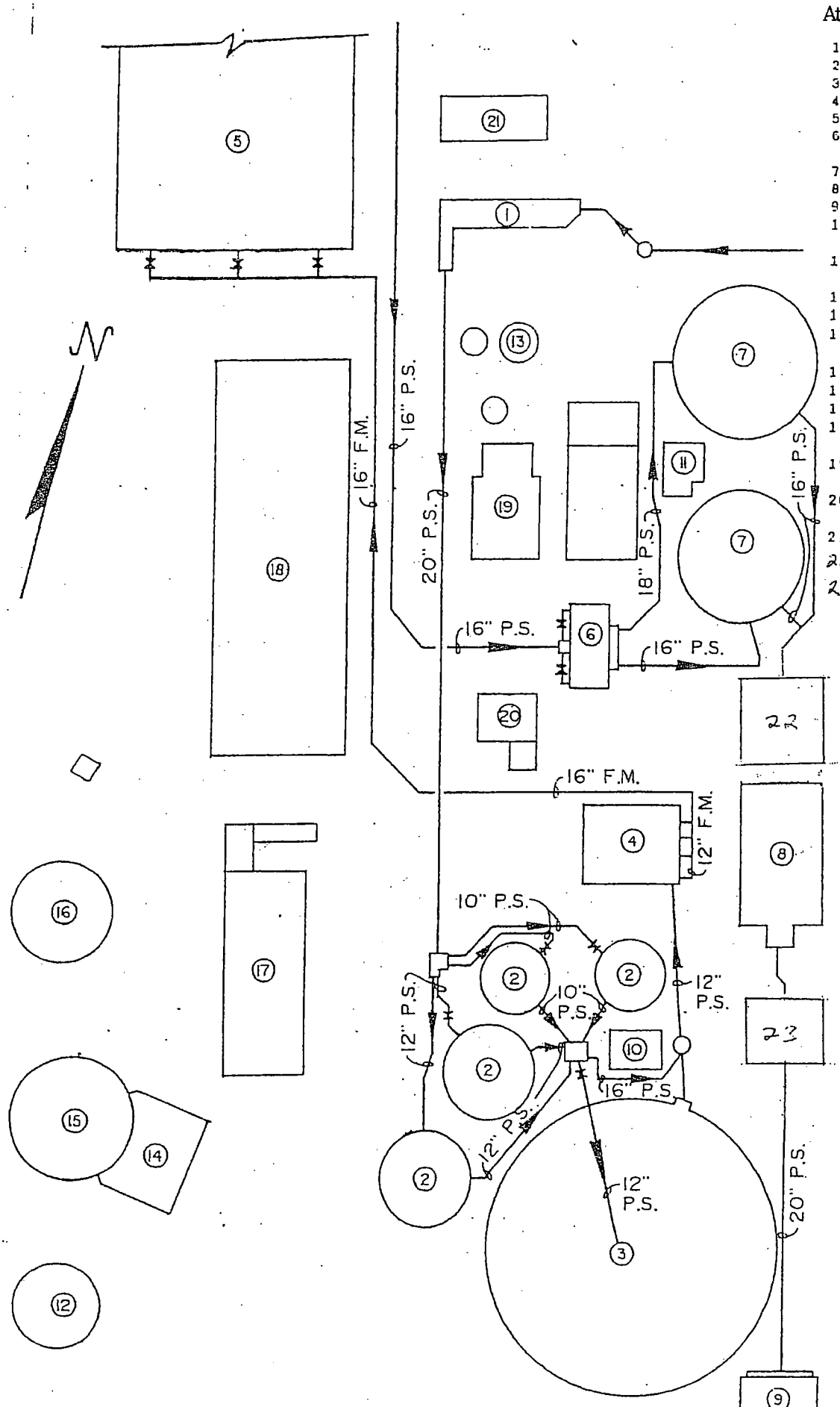
END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.



"LOCATION MAP"
FROM U.S. GEOLOGICAL SURVEY MAP
PHOTOREVISED 1971
WARRENTON WASTE TREATMENT PLANT
TOWN OF WARRENTON, FAUQUIER COUNTY,
STATE OF VIRGINIA

Attachment to Part B, B.3.

1. HEADWORKS
2. PRIMARY CLARIFIER
3. TRICKLING FILTER
4. PLANT PUMP STATION #1
5. RBC UNITS
6. FLASH MIXER & FLOCCULATORS
7. SECONDARY CLARIFIER
8. Ozone FILTERS
9. POST AERATION TANK
10. PRIMARY SLUDGE PUMP STATION
11. SECONDARY SLUDGE PUMP STATION
12. SLUDGE THICKENER NO.
13. SLUDGE THICKENER NO.
14. DIGESTER CONTROL BUILDING
15. PRIMARY DIGESTER
16. SECONDARY DIGESTER
17. CONTROL BUILDING
18. COVERED SLUDGE DRYING BEDS
19. CHEMICAL FEED BUILDING
20. DECHLORINATION BUILDING
21. BLOWER BUILDING
22. pump STATION #2
23. UV VAULT



PLANT LAYOUT AND FLOW PIPING SYSTEM

FIGURE I-1

Environmental Systems Service, Ltd.

218 North Main St. ♦ P.O. Box 520 ♦ Culpeper, Virginia 22701 ♦ Tel: (540) 825-6660 ♦ Fax (540) 825-4961 ♦ <www.ess-services.com>

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date:	09/25/2015
Report #	4913
Job #:	0004580
Customer #:	0000751
Customer PO #:	12062
Collected By:	Customer
Sample Location:	Expanded Effluent - Permit Renewal

The test results submitted in this report relate only to the samples submitted and as received by Environmental Systems Service, Ltd (ESS).

ESS assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise noted.

This laboratory report may not be reproduced, except in full, without the written approval of ESS.

If you have received this report in error, please notify ESS immediately at (540) 825-6660.

Approved by: Angie Woodward

A. Woodward/Technical Director

Reviewers Initials AW

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 09/25/2015
Report #: 4913
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: Customer
Sample Location: Expanded Effluent - Permit Renewal

Sample ID#: 0056388 **Sample Source:** Outfall 001
Sample Date/Time: 08/27/2015 / 08:45 **Date Received:** 08/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
Total Cyanide	< 0.005	mg/l	0.005	EPA 335.4	09/02/2015	13:32	01
Total Hardness as CaCO3	120	mg/l	0.0500	EPA 200.7	09/03/2015	13:12	57
Phenols, Total	< 0.02	mg/l	0.02	EPA 420.4	09/03/2015	12:14	01
Antimony, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/02/2015	09:33	57
Arsenic, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/02/2015	09:33	57
Beryllium, Total Recoverable	< 0.00100	mg/l	0.00100	EPA 200.8	09/02/2015	09:33	57
Cadmium, Total Recoverable	< 0.00250	mg/l	0.00250	EPA 200.8	09/02/2015	09:33	57
Chromium, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/02/2015	09:33	57
Copper, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/02/2015	09:33	57
Lead, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/02/2015	09:33	57
Mercury, Total Recoverable	< 0.000200	mg/l	0.000200	EPA 245.2	09/11/2015	11:06	57
Nickel, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/02/2015	09:33	57
Selenium, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/02/2015	09:33	57
Silver, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/02/2015	09:33	57
Thallium, Total Recoverable	< 0.00400	mg/l	0.00400	EPA 200.8	09/02/2015	09:33	57
Zinc, Total Recoverable	0.0194	mg/l	0.0100	EPA 200.8	09/02/2015	09:33	57
624 Volatiles							
Acrolein	< 0.0200	mg/l	0.0200	EPA 624	09/10/2015	05:10	574
Acrylonitrile	< 0.0200	mg/l	0.0200	EPA 624	09/10/2015	05:10	574
Benzene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Dichlorobromomethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Bromoform	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Bromomethane	< 0.00500	mg/l	0.00500	EPA 624	09/10/2015	05:10	574
Carbon Tetrachloride	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Chlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Chlorodibromomethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Chloroethane	< 0.00500	mg/l	0.00500	EPA 624	09/10/2015	05:10	574
2-Chloroethylvinylether	< 0.0400	mg/l	0.0400	EPA 624	09/10/2015	05:10	574
Chloroform	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
Chloromethane	< 0.00500	mg/l	0.00500	EPA 624	09/10/2015	05:10	574
1,2-Dichlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574
1,3-Dichlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 09/25/2015
Report #: 4913
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: Customer
Sample Location: Expanded Effluent - Permit Renewal

Sample ID#: 0056388 **Sample Source:** Outfall 001
Sample Date/Time: 08/27/2015 / 08:45 **Date Received:** 08/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	IN
1,4-Dichlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
1,1-Dichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
1,2-Dichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
1,1-Dichloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
trans-1,2-Dichloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
1,2-Dichloropropane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
cis-1,3-Dichloropropene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
trans-1,3-Dichloropropene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Ethylbenzene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Methylene Chloride	< 0.00500	mg/l	0.00500	EPA 624	09/10/2015	05:10	5
1,1,2,2-Tetrachloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Tetrachloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Toluene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
1,1,1-Trichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
1,1,2-Trichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Trichloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Trichlorofluoromethane	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
Vinyl Chloride	< 0.00200	mg/l	0.00200	EPA 624	09/10/2015	05:10	5
625 Semi-Volatiles							
Acenaphthene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Acenaphthylene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Anthracene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Benzidine	< 0.0200	mg/l	0.0200	EPA 625	09/03/2015	16:00	5
Benzo(a)anthracene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Benzo(a)pyrene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Benzo(b)fluoranthene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Benzo(ghi)perylene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Benzo(k)fluoranthene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
4-Bromophenyl phenyl ether	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Butylbenzyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
4-Chloro-3-methylphenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Bis(2-Chloroethoxy)methane	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 09/25/2015
Report #: 4913
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: Customer
Sample Location: Expanded Effluent - Permit Renewal

Sample ID#: 0056388 **Sample Source:** Outfall 001
Sample Date/Time: 08/27/2015 / 08:45 **Date Received:** 08/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	IN
Bis(2-Chloroethyl)ether	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Bis(2-Chloroisopropyl)ether	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2-Chloronaphthalene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2-Chlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
4-Chlorophenyl phenyl ether	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Chrysene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Di-n-butyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Di-n-octyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Dibenzo(a,h)anthracene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
3,3-Dichlorobenzidine	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2,4-Dichlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Diethyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2,4-Dimethylphenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Dimethyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2,4-Dinitrophenol	< 0.0200	mg/l	0.0200	EPA 625	09/03/2015	16:00	5
2,4-Dinitrotoluene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2,6-Dinitrotoluene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
1,2-Diphenylhydrazine	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Bis(2-Ethylhexyl)Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Fluoranthene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Fluorene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Hexachlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Hexachlorobutadiene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Hexachlorocyclopentadiene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Hexachloroethane	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Indeno(1,2,3-cd)pyrene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Isophorone	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
4,6-Dinitro-o-cresol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Naphthalene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
Nitrobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
2-Nitrophenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5
4-Nitrophenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	5

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 09/25/2015
Report #: 4913
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: Customer
Sample Location: Expanded Effluent - Permit Renewal

Sample ID#: 0056388 **Sample Source:** Outfall 001
Sample Date/Time: 08/27/2015 / 08:45 **Date Received:** 08/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INI
N-nitrosodimethylamine	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
N-nitrosodi-n-propylamine	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
N-nitrosodiphenylamine	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
Pentachlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
Phenanthrene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
Phenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
Pyrene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
1,2,4-Trichlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
2,4,6-Trichlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57
2,3,7,8-Tetrachlorodibenzodiox	< 0.0100	mg/l	0.0100	EPA 625	09/03/2015	16:00	57

574 Samples subcontracted to VELAP ID# 460160
013 Samples subcontracted to VELAP ID# 460013

ESS
Environmental Systems Service, Ltd.

218 North Main Street • Post Office Box 520 • Culpeper, Virginia 22701 •
800-541-2116 • 540-825-6660 • Fax. 540-825-4961

500 Stone Street • Post Office Box 736 • Bedford, Virginia 24523 •
540-586-5413 • Fax: 540-586-5530

Providing Solutions Through Quality Service | www.ess-services.com | Email: info@ess-services.com

4913

CHAIN OF CUSTODY RECORD

Company: Town of Warrenton
Contact: Allen Chichester
Address:
Address:
Phone:

Additional Notes/ Comments/ Special Instructions:

Project Name/Site: Expanded Effluent - Permit Renewal P.O.#: 120662

Sampled By: Trevor Osborne (Print Name) Trevor Osborne (Signature)

ESS SAMPLE ID	COLLECTION DATE	COLLECTION TIME	SAMPLE LOCATION	CONTAINERS SIZE	G/P	#	GRAB	COMP	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: Cyanide (1)	Hardness (3)	VOC's (624) (3)	Semi Vol (625) (1)	Phenols (1)	Metals* (6)	COMMENTS
56388	8-27-15	0845	Outfall 001	250ml	P	1	X		ww	NaOh	X						*Sb,As,Be,Cd,Cr,
				250ml	P	1	X		ww	HN03		X					Cu,Pb,Hg,Nl,Se,
				40ml	G	3	X		ww	HCl			X				Ag,Tl,Zn
				1L	G	2	X		ww	none				X			
				1L	G	1	X		ww	H2SO4					X		
				250ml	P	1	X		ww	HN03						X	
																	Preservative
																	pH Check: < 2

Relinquished by:	Date	Time	Received by	Relinquished by:	Date	Time	Received by
	8/27 2:45	1400					CN > 12
Relinquished by:	Date	Time	Received by	Relinquished by:	Date	Time	Received for Laboratory by:
					8-27-15	1400	A. Woodward

Method of Delivery:
☐ UPS ☐ Fed Ex ☒ Hand Delivery
☐ UPS Overnight ☐ Post Office

On Ice? (Y) N
Received @ 2.3 °C
☐ Under 2 hours

TAT:
Normal ✓ Rush ____
Need Results by ____
Extra charges will apply for Rush TAT.

Job # ~~A000682~~
Job # 4580
AW 8-27-15

Sample Condition "OK" Upon Receipt
Sample Condition Stamp

Revised 8/26/15

Environmental Systems Service, Ltd.

218 North Main St. ♦ P.O. Box 520 ♦ Culpeper, Virginia 22701 ♦ Tel: (540) 825-6660 ♦ Fax (540) 825-4961 ♦ <www.ess-services.com>

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date:	10/01/2015
Report #	5074
Job #:	0004580
Customer #:	0000751
Customer PO #:	12062
Collected By:	ESS Employee
Sample Location:	Expanded Effluent-Permit Renewal (#2)

The test results submitted in this report relate only to the samples submitted and as received by Environmental Systems Service, Ltd (ESS).

ESS assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise noted.

This laboratory report may not be reproduced, except in full, without the written approval of ESS.

If you have received this report in error, please notify ESS immediately at (540) 825-6660.

Approved by: Angie Woodward

A. Woodward/Technical Director

Reviewers Initials AW

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5074
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent-Permit Renewal (#2)

ample ID#: 0056754 **Sample Source:** Outfall 001
ample Date/Time: 09/04/2015 / 10:00 **Date Received:** 09/04/2015

rameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
tal Cyanide	< 0.005	mg/l	0.005	EPA 335.4	09/10/2015	14:06	013
tal Hardness as CaCO3	110	mg/l	0.0500	EPA 200.7	09/14/2015	12:49	574
enols, Total	< 0.02	mg/l	0.02	EPA 420.4	09/17/2015	12:51	013
timony, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/15/2015	13:43	574
senic, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/15/2015	13:43	574
eryllium, Total Recoverable	< 0.00100	mg/l	0.00100	EPA 200.8	09/15/2015	13:43	574
admium, Total Recoverable	< 0.00250	mg/l	0.00250	EPA 200.8	09/15/2015	13:43	574
romium, Total Recoverable	0.00646	mg/l	0.00500	EPA 200.8	09/15/2015	13:43	574
opper, Total Recoverable	0.00535	mg/l	0.00500	EPA 200.8	09/15/2015	13:43	574
ead, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/15/2015	13:43	574
ercury, Total Recoverable	< 0.000200	mg/l	0.000200	EPA 245.2	09/15/2015	13:51	574
ickel, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/15/2015	13:43	574
elenium, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/15/2015	13:43	574
ilver, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/15/2015	13:43	574
hallium, Total Recoverable	< 0.00400	mg/l	0.00400	EPA 200.8	09/15/2015	13:43	574
inc, Total Recoverable	0.0198	mg/l	0.0100	EPA 200.8	09/15/2015	13:43	574
624 Volatiles							
crolein	< 0.0200	mg/L	0.0200	EPA 624	09/14/2015	02:54	574
crylonitrile	< 0.0200	mg/L	0.0200	EPA 624	09/14/2015	02:54	574
enzene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
ichlorobromomethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
romoform	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
romomethane	< 0.00500	mg/L	0.00500	EPA 624	09/14/2015	02:54	574
arbon Tetrachloride	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
hlorobenzene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
hlorodibromomethane	< 0.00500	mg/L	0.00500	EPA 624	09/14/2015	02:54	574
hloroethane	< 0.00500	mg/L	0.00500	EPA 624	09/14/2015	02:54	574
-Chloroethylvinylether	< 0.0400	mg/L	0.0400	EPA 624	09/14/2015	02:54	574
hloroform	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
hloromethane	< 0.00500	mg/L	0.00500	EPA 624	09/14/2015	02:54	574
,1-Dichloroethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
,2-Dichloroethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
,1-Dichloroethene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5074
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent-Permit Renewal (#2)

ample ID#: 0056754 **Sample Source:** Outfall 001
ample Date/Time: 09/04/2015 / 10:00 **Date Received:** 09/04/2015

rameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
1-Dichloroethene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
ns-1,2-Dichloroethene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
2-Dichloropropane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
-1,3-Dichloropropene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
ns-1,3-Dichloropropene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
ylbenzene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
thylene Chloride	< 0.00500	mg/L	0.00500	EPA 624	09/14/2015	02:54	574
1,2,2-Tetrachloroethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
trachloroethene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
luene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
1,1-Trichloroethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
1,2-Trichloroethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
chloroethene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
chlorofluoromethane	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
yl Chloride	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
2-Dichlorobenzene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
3-Dichlorobenzene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
4-Dichlorobenzene	< 0.00200	mg/L	0.00200	EPA 624	09/14/2015	02:54	574
625 Semi-Volatiles							
enaphthene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
enaphthylene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
thracene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
nzidine	< 0.0204	mg/L	0.0204	EPA 625	09/10/2015	18:36	574
nzo(a)anthracene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
nzo(a)pyrene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
nzo(b)fluoranthene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
nzo(ghi)perylene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
nzo(k)fluoranthene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Bromophenyl phenyl ether	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
tylbenzyl Phthalate	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Chloro-3-methylphenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
s(2-Chloroethoxy)methane	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
s(2-Chloroethyl)ether	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5074
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent-Permit Renewal (#2)

Sample ID#: 0056754 **Sample Source:** Outfall 001
Sample Date/Time: 09/04/2015 / 10:00 **Date Received:** 09/04/2015

rameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
s(2-Chloroethyl)ether	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
s(2-Chloroisopropyl)ether	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Chloronaphthalene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Chlorophenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Chlorophenyl phenyl ether	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
rysene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-n-butyl Phthalate	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-n-octyl Phthalate	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
enzo(a,h)anthracene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Dichlorobenzidine	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Dichlorophenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
thyl Phthalate	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Dimethylphenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
nethyl Phthalate	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Dinitrophenol	< 0.0204	mg/L	0.0204	EPA 625	09/10/2015	18:36	574
-Dinitrotoluene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Dinitrotoluene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Diphenylhydrazine	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
(2-Ethylhexyl)Phthalate	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
oranthene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
orene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
xachlorobenzene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
xachlorobutadiene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
xachlorocyclopentadiene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
xachloroethane	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
eno(1,2,3-cd)pyrene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
phorone	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
-Dinitro-o-cresol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
phthalene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
robenzene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
litrophenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
litrophenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
itrosodimethylamine	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5074
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent-Permit Renewal (#2)

Sample ID#: 0056754 **Sample Source:** Outfall 001
Sample Date/Time: 09/04/2015 / 10:00 **Date Received:** 09/04/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
N-nitrosodimethylamine	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
N-nitrosodi-n-propylamine	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
N-nitrosodiphenylamine	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Pentachlorophenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Phenanthrene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Phenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
Pyrene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
1,2,4-Trichlorobenzene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
2,4,6-Trichlorophenol	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
2,3,7,8-Tetrachlorodibenzodiox	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
1,2-Dichlorobenzene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
1,3-Dichlorobenzene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574
1,4-Dichlorobenzene	< 0.0102	mg/L	0.0102	EPA 625	09/10/2015	18:36	574

574 Samples subcontracted to VELAP ID# 460160
013 Samples subcontracted to VELAP ID# 460013

ESS
Environmental Systems Service, Ltd.
218 North Main Street • Post Office Box 520 • Culpeper, Virginia 22701 •
800-541-2116 • 540-825-6660 • Fax: 540-825-4961
500 Stone Street • Post Office Box 736 • Bedford, Virginia 24523 •
540-586-5413 • Fax: 540-586-5530

5074
COC # Sticker

Providing Solutions Through Quality Service
www.ess-services.com
Email: info@ess-services.com

CHAIN OF CUSTODY RECORD

Company: Town of Warrenton
Contact: Allen Chilhester
Address:
Address:
Phone:

Additional Notes/ Comments/ Special Instructions:
#2 Expanded Effluent.

Project Name/Site: #2 Expanded Eff-point reveros P.O.#: 12062
Sampled By: Sean Munu (Print Name) — [signature] (Signature)

ESS SAMPLE ID	COLLECTION DATE	TIME	SAMPLE LOCATION	SIZE	G/P	#	GRAB	COMP	SAMPLE MATRIX	PRESERVATIVE	CN-	Hg	VOC (624)	Semi Vol (625)	Phenol	Metals*				COMMENTS
56754	9/4/2015	1000	Outfall 001	250	P	1	X		WW	NaOH	X									
↓	↓	↓	↓	250	P	1	X		↓	HNO3		X								Metals
				40ml.	G	3	X			HCl			X							200.8
				1L	G	2	X			—				X						
				1L	G	1	X			H2SO4					X					
				250ml.	P	1	X			HNO3						X				

Preservative pH Check: <2

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature]	9/4/2015	1120					CN712
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received for Laboratory by:
					9-4-15	1120	Kim Rinaldo

Method of Delivery: ☐ UPS ☐ Fed Ex ☒ Hand Delivery ☐ UPS Overnight ☐ Post Office

On Ice? (Y) N
Received @ 1.1 °C
☒ Under 2 hours

TAT: Normal ✓ Rush ____
Need Results by ____
Extra charges will apply for Rush TAT.

Job # ____
Job # ____

Sample Condition "OK" Upon Receipt
Sample Condition Stamp

Environmental Systems Service, Ltd.

218 North Main St. ♦ P.O. Box 520 ♦ Culpeper, Virginia 22701 ♦ Tel: (540) 825-6660 ♦ Fax (540) 825-4961 ♦ <www.ess-services.com>

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date:	10/01/2015
Report #	5239
Job #:	0004580
Customer #:	0000751
Customer PO #:	12062
Collected By:	ESS Employee
Sample Location:	Expanded Effluent

The test results submitted in this report relate only to the samples submitted and as received by Environmental Systems Service, Ltd (ESS).

ESS assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise noted.

This laboratory report may not be reproduced, except in full, without the written approval of ESS.

If you have received this report in error, please notify ESS immediately at (540) 825-6660.

Approved by: Angie Woodward

A. Woodward/Technical Director

Reviewers Initials AW

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5239
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent

Sample ID#: 0057070 **Sample Source:** Outfall 001
Sample Date/Time: 09/11/2015 / 10:10 **Date Received:** 09/11/2015

arameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
otal Cyanide	< 0.005	mg/l	0.005	EPA 335.4	09/18/2015	09:35	013
otal Hardness as CaCO3	116	mg/l	0.0500	EPA 200.7	09/17/2015	15:45	574
henols, Total	< 0.02	mg/l	0.02	EPA 420.4	09/17/2015	12:51	013
ntimony, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/17/2015	12:38	574
rsenic, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/17/2015	12:38	574
eryllium, Total Recoverable	< 0.00100	mg/l	0.00100	EPA 200.8	09/17/2015	12:38	574
admium, Total Recoverable	< 0.00250	mg/l	0.00250	EPA 200.8	09/17/2015	12:38	574
hromium, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/17/2015	12:38	574
opper, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/17/2015	12:38	574
ead, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/17/2015	12:38	574
ercury, Total Recoverable	< 0.000200	mg/l	0.000200	EPA 245.2	09/17/2015	07:39	574
ckel, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/17/2015	12:38	574
elenium, Total Recoverable	< 0.0100	mg/l	0.0100	EPA 200.8	09/17/2015	12:38	574
lver, Total Recoverable	< 0.00500	mg/l	0.00500	EPA 200.8	09/17/2015	12:38	574
allium, Total Recoverable	< 0.00400	mg/l	0.00400	EPA 200.8	09/17/2015	12:38	574
nc, Total Recoverable	0.0181	mg/l	0.0100	EPA 200.8	09/17/2015	12:38	574
624 Volatiles							
rolein	< 0.0250	mg/l	0.0250	EPA 624	09/21/2015	17:00	574
rylonitrile	< 0.0250	mg/l	0.0250	EPA 624	09/21/2015	17:00	574
nzene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
chlorobromomethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
omoform	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
omomethane	< 0.00500	mg/l	0.00500	EPA 624	09/21/2015	17:00	574
rbon Tetrachloride	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
lorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
lorodibromomethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
loroethane	< 0.00500	mg/l	0.00500	EPA 624	09/21/2015	17:00	574
Chloroethylvinylether	< 0.0200	mg/l	0.0200	EPA 624	09/21/2015	17:00	574
loroform	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
loromethane	< 0.00500	mg/l	0.00500	EPA 624	09/21/2015	17:00	574
-Dichlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
-Dichlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
-Dichlorobenzene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5239
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent

Sample ID#: 0057070 **Sample Source:** Outfall 001
Sample Date/Time: 09/11/2015 / 10:10 **Date Received:** 09/11/2015

arameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
,1-Dichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
,2-Dichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
,1-Dichloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
ans-1,2-Dichloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
,2-Dichloropropane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
s-1,3-Dichloropropene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
ans-1,3-Dichloropropene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
thylbenzene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
ethylene Chloride	< 0.00500	mg/l	0.00500	EPA 624	09/21/2015	17:00	574
1,2,2-Tetrachloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
etrachloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
oluene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
1,1-Trichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
1,2-Trichloroethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
ichloroethene	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
ichlorofluoromethane	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
nyl Chloride	< 0.00200	mg/l	0.00200	EPA 624	09/21/2015	17:00	574
625 Semi-Volatiles							
enaphthene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
enaphthylene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
thracene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
nzidine	< 0.0200	mg/l	0.0200	EPA 625	09/16/2015	18:10	574
nzo(a)anthracene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
nzo(a)pyrene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
nzo(b)fluoranthene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
nzo(ghi)perylene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
nzo(k)fluoranthene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
Bromophenyl phenyl ether	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
tylbenzyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
Chloro-3-methylphenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
s(2-Chloroethoxy)methane	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
s(2-Chloroethyl)ether	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
s(2-Chloroisopropyl)ether	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5239
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent

Sample ID#: 0057070 **Sample Source:** Outfall 001
Sample Date/Time: 09/11/2015 / 10:10 **Date Received:** 09/11/2015

arameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
-Chloronaphthalene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
-Chlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
-Chlorophenyl phenyl ether	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
hrysene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
i-n-butyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
i-n-octyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
ibenzo(a,h)anthracene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
,3-Dichlorobenzidine	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
,4-Dichlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
iethyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
,4-Dimethylphenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
imethyl Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
,4-Dinitrophenol	< 0.0200	mg/l	0.0200	EPA 625	09/16/2015	18:10	574
4-Dinitrotoluene	*< 0.0100*	*mg/l*	*0.0100*	*EPA 625*	*09/16/2015*	*18:10*	*574*
6-Dinitrotoluene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
2-Diphenylhydrazine	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
is(2-Ethylhexyl)Phthalate	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
uoranthene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
uorene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
exachlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
exachlorobutadiene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
exachlorocyclopentadiene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
exachloroethane	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
deno(1,2,3-cd)pyrene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
ophorone	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
6-Dinitro-o-cresol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
aphthalene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
itrobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
Nitrophenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
Nitrophenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
-nitrosodimethylamine	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
-nitrosodi-n-propylamine	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
-nitrosodiphenylamine	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 10/01/2015
Report #: 5239
Job #: 0004580
Customer #: 0000751
Customer PO #: 12062
Collected By: ESS Employee
Sample Location: Expanded Effluent

Sample ID#: 0057070 **Sample Source:** Outfall 001
Sample Date/Time: 09/11/2015 / 10:10 **Date Received:** 09/11/2015

arameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
entachlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
henanthrene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
nenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
yrene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
2,4-Trichlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
4,6-Trichlorophenol	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
3,7,8-Tetrachlorodibenzodiox	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
2-Dichlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
3-Dichlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574
4-Dichlorobenzene	< 0.0100	mg/l	0.0100	EPA 625	09/16/2015	18:10	574

574 Samples subcontracted to VELAP ID# 460160
013 Samples subcontracted to VELAP ID# 460013

SAMPLE CHAIN OF CUSTODY RECORD

5239

Company Town of Waccenton
Contact Allen Chichester
Address
Address
Phone

ENVIRONMENTAL SYSTEMS SERVICE, LTD.

ESS
Environmental Systems Service, Ltd.

www.ess-services.com

218 North Main St
Post Office Box 520
Culpeper, VA 22701
800-541-2116
540-825-6660 Fax: 540-825-4961

500 Stone St
Post Office Box 736
Bedford, VA 24523
540-586-5413
Fax 540-586-5530

Project Name/Site Expanded EFF - Permit Req #3 Final P.O.# 12062

Sampled By: TREVOR OSBORNE (Print Name) Trevor Osborne (Signature)

ESS SAMPLE ID	COLLECTION DATE	COLLECTION TIME	SAMPLE LOCATION	CONTAINERS SIZE	C/P	#	GRAB	COMP	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: Cyanide	Hardness	VOC (624)	Semi Vol. (625)	Phenols	Metals +	COMMENTS
57070	9-11-15	1010	Outfall 001				X		WW	Nach	X						Metals
				250	P	1	X			HNO3		X					@ 200.8
				40mL	G	3	X			HCL			X				
				1 L	G	2	Y			———				X			
				1L	G	1	X			H2SO4					X		
				250	P	1	X			HNO3						X	

Preservative
pH Check: <2

Relinquished by:	Date	Time	Received by:
Trevor Osborne	9-11-15	1403	

Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received for Laboratory by:
	9/11/15	1403	

Method of Delivery:
☐ UPS ☐ Fed Ex ☑ Hand Delivery
☐ UPS Overnight ☐ Post Office

On Ice? (Y) N
Received @ 3.3 °C
☐ Under 2 hours

TAT:
Normal ____ Rush ____
Need Results by ____
Extra charges will apply for Rush TAT

W.O.# 4580
W.O.# ____

Amt Paid $ ____
Check # ____

Revised 10/10/13

Client: Environmental Systems Service, LTD.
Project ID: ESSL1518
Client Sample ID: Warrenton WWTP outfall 001 WO57500
Permit No: VA0021172
Sample Period: 9/21/15 to 9/24/15

Coastal Bioanalysts, Inc.

Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:	**Prepared By:**
Ms. Angie Woodward Environmental Systems Service, LTD. 218 North Main Street, P.O. Box 520 Culpeper, VA 22701	Coastal Bioanalysts, Inc. 6400 Enterprise Court Gloucester, VA 23061 (804) 694-8285 www.coastalbio.com Contact: Peter F. De Lisle, Technical Director

Chronic Test Results* - Untreated Sample

Species-Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	$T.U._C$	IC25	48-h LC50	LC50 95% C.L.	$T.U._{Ac}$
C. dubia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1002.0	Reproduction	17.0	34.0	24.0	31	**5.88**	29.0	N/A	N/A	N/A
P. promelas	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1000.0	Biomass	17.0	34.0	24.0	15	**5.88**	95.6	N/A	N/A	N/A

Chronic Test Results* - UV Irradiated Sample

Species-Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	$T.U._C$	IC25	48-h LC50	LC50 95% C.L.	$T.U._{Ac}$
C. dubia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1002.0	Reproduction	100	>100	>100	23	**1.00**	>100	N/A	N/A	N/A
P. promelas	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1000.0	Biomass	100	>100	>100	13	**1.00**	>100	N/A	N/A	N/A

*Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable.
For each test method record the highest endpoint T.U.c value (bold) on the DMR.

Chronic Test QA/QC Reference Toxicant: KCl Units: mg/l Test Organism Source: CBI Stock Cultures

Species-Method (Ref. Test Date)	Data Source	% Survival		Reproduction (# Young) or Biomass (mg)					RTT in Control?
		Cont.	NOEC	Cont.	NOEC	PMSD	IC25	IC25 A.L.	
C. dubia 1002.0	RTT	100	500	31.5	250	22	346	N/A	Yes
(9/8/15-9/14/15)	CC	99	500	27.9	250	18	345	275-415	
P. promelas 1000.0	RTT	100	500	0.63	500	17	610	N/A	Yes
(9/8/15-9/15/15)	CC	99	500	0.62	500	14	619	582-655	

Note: RTT = Reference Toxicant Test, CC = Control Chart, Cont. = Control group.

VELAP# 460030
EPA# VA01116

This is covered under our contract with Synagro Central, LLC's permit.

Memo

To: Bo Tucker

From: Allen G. Chichester

Date: June 29, 2015

Re: Biosolids Contract with Synagro Central, LLC; IFB#13-002 (FY 2016)

The current purchase order with Synagro Central LLC expires on June 30. I am recommending that the Town exercise the third renewal option of the contract for upcoming FY 2016. There will be a modest pricing increase as stated on the "Agreement" between Synagro Central, LLC and the Town of Warrenton, VA.

Allen Chichester

From: Jim Henderson [jhenderson@SYNAGRO.com]
Sent: Monday, June 29, 2015 9:52 AM
To: Allen Chichester
Cc: Allen Guilliams; Matt deWitt
Subject: Synagro Biosolids Management Agreement Amendment
Attachments: AMD_Town of Warrenton, VA_2015-06-29.pdf; Jim Henderson.vcf

Allen,

Please see the attached amendment to the biosolids management agreement that you requested. It is structured with a modest CPI increase. If you could provide a new PO for invoicing along with a signed copy of the amendment, it would be appreciated. Please contact me if you have any questions.

Regards,

Jim Henderson
Business Development Executive
jhenderson@synagro.com
1-757-323-6688 direct
1-757-323-6688

SYNAGRO
3619 Calverton Way Chesapeake, VA 23321

AMENDMENT TO DISPOSAL OF WASTEWATER TREATMENT PLANT BIOSOLIDS AGREEMENT BETWEEN THE TOWN OF WARRENTON, VA AND SYNAGRO CENTRAL, LLC

THIS AMENDMENT ("Amendment") is made as of June 29, 2015 to the Disposal of Wastewater Treatment Plant Biosolids Agreement dated as of July 17, 2012 (as amended, modified and supplemented as of the date hereof, the "Agreement") by and between the Town of Warrenton, VA ("Town") and Synagro Central, LLC ("Service Provider").

On June 29, 2015, the Agreement for the transportation and land application of Class B biosolids and/ or liquid hauling for disposal for Town was amended for the purpose of extension.

WITNESSETH:

WHEREAS, Town and Service Provider are parties to the Agreement; and

WHERAS, the Agreement expires by its terms on June 30, 2015; and

WHEREAS, Town and Service Provider desire to extend the Agreement and amend certain of its terms as set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants contained herein the parties hereto intending to be legally bound hereby agree as follows:

1. The term of the contract shall be extended for a period of one (1) year commencing on July 1, 2015 and continuing through June 30, 2016. The Service Provider and Town further agree that at the end of this term, this Contract may be extended for additional periods as mutually agreed in writing by both parties.

2. The pricing set forth in this Amendment shall be adjusted using the Consumer Price Index (CPI) with a base month of March 2014, and current month of March, 2015 for the Washington- Baltimore, DC-MD-VA-WV.

   Pricing July 1, 2014 through June 30, 2015:
   Land Application of Class B Biosolids: $25.51 per wet ton
   Liquid Hauling and Disposal: $0.1082 per gallon

   Revised pricing July 1, 2015 through June 30, 2016:
   Land Application of Class B Biosolids: $25.57 per wet ton
   Liquid Hauling and Disposal: $0.1085 per gallon

3. All other terms of the Agreement remain in full force and effect.

IN WITNESS WHEREOF, the undersigned have placed their hands and seals on the date first above written.

TOWN OF WARRENTON, VA

By: _____
Name:
Title:
Date:

SYNAGRO CENTRAL LLC

By: _____
Name:
Title:
Date:

SIGNATURE PAGE TO THE AMENDMENT BETWEEN TOWN OF WARRENTON, VA AND SYNAGRO CENTRAL, LLC TO EXTEND THE TERM OF THE AGREEMENT DATED JUNE 29, 2015

TOWN OF WARRENTON
REQUISITION FOR PURCHASE

Date June 29, 2015

TO: The Town Manager

Please purchase the items specified below and have delivered

To: [illegible]

Description of Goods / Service Requisitioned	Charge to Fund	Depart.	Acct#	Quantity Ordered	Unit Price	Unit	Total
[illegible]				2,500	25.57	TON	63925.00
[illegible]							
[illegible]							
[illegible]							

Instructions: **Attach required quotes and related documentation to support vendor selection.**

Shipping and Handling Charges

TOTAL 63,925.00

For Use of Department Making Requisition

I certify that this purchase is necessary for the operation of this department and was made in compliance with the Town's purchasing policies and procedures.

[illegible] Signature

Dept. Head

For Use of Finance Department

Proposals sent out _____

Purchasing Approval _____

P.O. No. _____ Date _____

Issued To _____

Available Budget _____

Encumbered _____

You are hereby authorized to order/deliver the items listed above and charge as indicated.

Town Manager

Vendor Name and Address

[illegible] Capital LLC
[illegible] Williams Court Suite 101
Baltimore MD 21220

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
[illegible]
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

Permit No.: VPA03862
Effective Date: December 15, 2010
Modification Date: July 5, 2012
Expiration Date: December 14, 2020

AUTHORIZATION TO MANAGE POLLUTANTS UNDER THE
VIRGINIA POLLUTION ABATEMENT PERMIT
AND
THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the State Water Control Law and the Permit Regulation adopted pursuant thereto, the following owner is authorized to manage pollutants in conformity with the application, plans, specifications and supporting data submitted to the Department of Environmental Quality and other conditions set forth in this permit.

Owner: Synagro Central, LLC
Owner Address: 10647 Tidewater Trail
Champlain, VA 22438
Facility Name: Synagro Central, LLC – Fauquier County, Virginia

The authorized pollutant management shall be in accordance with this cover page, Part I - Monitoring Requirements and Special Conditions and Part II - Conditions Applicable to All VPA Permits, as set forth herein.

Regional Director, Department of Environmental Quality

July 5, 2012
Date

FACILITY NAME: Town of Warrenton

MONITORING PERIOD: FROM 4/1/15 TO 6/30/15

Part I — To Be Completed by PREPARERS of Sewage Sludge

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	57.4	41 mg/kg	75 mg/kg
Cadmium	<2.00	39 mg/kg	85 mg/kg
Chromium	26.6	1200 mg/kg	3000 mg/kg
Copper	389	1500 mg/kg	4300 mg/kg
Lead	<4.00	300 mg/kg	840 mg/kg
Mercury	1.44	17 mg/kg	57 mg/kg
Molybdenum	5.29	18 mg/kg	75 mg/kg
Nickel	10.4	420 mg/kg	420 mg/kg
Selenium	<4.00	36 mg/kg	100 mg/kg
Zinc	496	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	35,900	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values.

B. Pathogen Reduction (40 CFR 503.32) — Please indicate the level achieved

☐ Class A ☒ Class B

C. Vector Attraction Reduction (40 CFR 503.33) — Please indicate the option performed

☐ Option 1 ☒ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title *(type or print)*	B. Area Code and Telephone Number
Edward B. Tucker, Jr. Director of Public Works and Utilities	540-347-1858
C. Signature	D. Date Signed
	7/15/15

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 05/04/2015
Report #: 1719
Job #: R000638
Customer #: 0000751
Customer PO #: 11578
Collected By: Customer
Sample Location: Quarterly Sludge Testing

Sample ID#: 0049117 **Sample Source:** Drying Bed
Sample Date/Time: 04/01/2015 / 11:50 **Date Received:** 04/01/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
Soil/Waste pH	7.97	SU @18°C	N/A	EPA 9045D	04/01/2015	17:35	AW
Total Solids (%)	20.9	%	0.01	SM 2540G-2011	04/01/2015	18:15	JI
Ammonia, as N	9,410	mg/kg	10.0	SM 4500 NH3C	04/08/2015	11:39	001
Total Kjeldahl Nitrogen	35,900	mg/kg	10.0	SM 4500 NH3C-TKN	04/06/2015	08:39	001
Nitrite + Nitrate, Solid	< 2.00	mg/kg	2.00	SM 4500NO3F	04/06/2015	08:40	001
Arsenic, Total Recoverable	57.4	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Cadmium, Total Recoverable	< 2.00	mg/kg	2.00	SW-846 6010B	04/08/2015	10:07	574
Chromium, Total Recoverable	26.6	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Copper, Total Recoverable	389	mg/kg	2.00	SW-846 6010B	04/08/2015	10:07	574
Lead, Total Recoverable	< 4.00	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Mercury, Total Recoverable	1.44	mg/kg	0.0250	SW-846 7471A	04/08/2015	11:43	574
Molybdenum, Total Recoverable	5.29	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Nickel, Total Recoverable	10.4	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Selenium, Total Recoverable	< 4.00	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Zinc, Total Recoverable	496	mg/kg	4.00	SW-846 6010B	04/08/2015	10:07	574
Fecal Coliform	11,000	MPN/g	180	SM 9221 E+C-2006	04/01/2015	15:50	JI

Sample ID#: 0049118 **Sample Source:** Thickener
Sample Date/Time: 04/01/2015 / 11:50 **Date Received:** 04/01/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
Total Solids (%)	2.45	%	0.01	SM 2540 G-2011	04/01/2015	18:15	JI
Fecal Coliform	22,000,000	MPN/g	180	SM 9221 E+C-2006	04/01/2015	16:00	JI

Sample ID#: 0049119 **Sample Source:** Digester
Sample Date/Time: 04/01/2015 / 11:50 **Date Received:** 04/01/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
Total Solids (%)	1.93	%	0.01	SM 2540 G-2011	04/01/2015	18:15	JI
Fecal Coliform	1,240,000	MPN/g	180	SM 9221 E+C-2006	04/01/2015	16:05	JI

COMMENT:
Fecal and metal's results are reported on a dry weight basis.

VELAP Lab ID # 460019 VA DW Lab ID # 00115

Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 05/04/2015
Report #: 1719
Job #: R000638
Customer #: 0000751
Customer PO #:
Collected By: Customer
Sample Location: Quarterly Sludge Testing

Sample ID#: 0049119
Sample Date/Time: 04/01/2015 / 11:50
Sample Source: Digester
Date Received: 04/01/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT

Fecal and metal's results are reported on a dry weight basis.

001 Samples subcontracted to VELAP ID# 460014
574 Samples subcontracted to VELAP ID# 460160

VELAP Lab ID # 460019 VA DW Lab ID # 00115

1719

SAMPLE CHAIN OF CUSTODY RECORD

Company Town of Warrenton
Contact Allen Chichester
Address P.O. Box 341
Address Warrenton, Virginia 22186
Phone (540) 347-1104; 3913 (fax)

ENVIRONMENTAL SYSTEMS SERVICE, LTD.

ESS

www.ess-services.com

218 North Main St
Post Office Box 520
Culpeper, VA 22701
800-541-2116
540-825-6660 Fax: 540-825-4961

500 Stone St
Post Office Box 736
Bedford, VA 24523
540-586-5413
Fax 540-586-5530

Project Name/Site Quarterly Sludge Testing

P.O.# 11578

Sampled By: Jeff Jannarelli (Print Name) (Signature)

ESS SAMPLE ID.	COLLECTION DATE	COLLECTION TIME	SAMPLE LOCATION	CONTAINERS SIZE	G/P	#	GRAB	COMP	SAMPLE MATRIX	PRESERVATIVE	pH	% Solids	NH3; TKN	NO2/NO3	metals*	Fecal				COMMENTS
49117	4/1/15	1150	Drying Bed	250ml	P	1		X	sludge	none	X	X								*As, Cd, Cr, Cu,
	4/1/15	1150	Drying Bed	250ml	P	1		X	sludge	none			X	X						Pb, Hg, Mo, Ni,
	4/1/15	1150	Drying Bed	250ml	P	1		X	sludge	none					X					Se, Zn
	4/1/15	1150	Drying Bed	125ml	P	1		X	sludge	Na Thios						X				Mercury only
49118	4/1/15	1150	Thickener	250ml	P	1		X	sludge	none		X								
	4/1/15	1150	Thickener	125ml	P	1		X	sludge	Na Thios						X				
49119	4/1/15	1150	Digester	250ml	P	1		X	sludge	none		X								
	4/1/15	1150	Digester	125ml	P	1		X	sludge	Na Thios						X				Preservative
																				pH Check:

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
J Jannarelli	4/1/15	11:56	A Kevin Beahm	A Kevin Beahm	4/1/15	12:56	
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received for Laboratory by:
					4/1/15	1356	

Method of Delivery:
☐ UPS ☐ Fed Ex ☒ Hand Delivery
☐ UPS Overnight ☐ Post Office

On Ice? (Y) N
Received @ 3.9 °C
☒ Under 2 hours

TAT:
Normal ✓ Rush ____
Need Results by ____
Extra charges will apply for Rush TAT.

W.O.# R000638
W.O.# ____

Amt Paid $ ____
Check # ____

Sample Condition "OK" Upon Receipt

Revised 03/04/09

FACILITY NAME: Town of Warrenton

MONITORING PERIOD: FROM 1/1/15 TO 3/31/15

Part I — To Be Completed by PREPARERS of Sewage Sludge

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	37.0	41 mg/kg	75 mg/kg
Cadmium	<2.00	39 mg/kg	85 mg/kg
Chromium	15.7	1200 mg/kg	3000 mg/kg
Copper	225	1500 mg/kg	4300 mg/kg
Lead	<4.00	300 mg/kg	840 mg/kg
Mercury	0.133	17 mg/kg	57 mg/kg
Molybdenum	<4.00	18 mg/kg	75 mg/kg
Nickel	5.76	420 mg/kg	420 mg/kg
Selenium	<4.00	36 mg/kg	100 mg/kg
Zinc	301	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	53,400	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values.

B. Pathogen Reduction (40 CFR 503.32) — Please indicate the level achieved

☐ Class A ☒ Class B

C. Vector Attraction Reduction (40 CFR 503.33) — Please indicate the option performed

☐ Option 1 ☒ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title (type or print)	B. Area Code and Telephone Number
Edward B. Tucker, Jr. Director of Public Works and Utilities	540-347-1858
C. Signature	D. Date Signed
	4/20/15

ESS
Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date: 02/10/2015
Job #: R000604
Customer #: 0000751
Customer PO #: 11578
Collected By: Customer
Sample Location: Quarterly Sludge Testing

Sample ID#: 0046363 **Sample Source:** Drying Bed
Sample Date/Time: 01/27/2015 / 10:10 **Date Received:** 01/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INI
Soil/Waste pH	8.15	SU@ 20°C	N/A	EPA 9045D	01/27/2015	15:55	Kl
Total Solids (%)	24.17	%	0.01	SM 2540 G-2011	01/29/2015	14:15	JM
Ammonia, as N	6,540	mg/kg	10.0	SM 21 4500 NH3C	01/30/2015	08:50	00
Total Kjeldahl Nitrogen	53,400	mg/kg	10.0	SM 4500-NH3C-TKN	01/30/2015	08:50	00
Nitrite + Nitrate, Solid	19.4	mg/kg	2.00	SM-4500NO3F	01/30/2015	08:45	00
Arsenic, Total Recoverable	37.0	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Cadmium, Total Recoverable	<2.00	mg/kg	2.00	SW-846 6010B	02/02/2015	09:42	57
Chromium, Total Recoverable	15.7	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Copper, Total Recoverable	225	mg/kg	2.00	SW-846 6010B	02/02/2015	09:42	57
Lead, Total Recoverable	<4.00	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Mercury, Total Recoverable	0.133	mg/kg	0.0250	SW-846 7471A	02/02/2015	10:34	57
Molybdenum, Total Recoverable	<4.00	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Nickel, Total Recoverable	5.76	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Selenium, Total Recoverable	<4.00	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Zinc, Total Recoverable	301	mg/kg	4.00	SW-846 6010B	02/02/2015	09:42	57
Fecal Coliform	9,020	MPN/g	180	SM 9221 E+C-2006	01/27/2015	15:23	J

Sample ID#: 0046364 **Sample Source:** Thickener
Sample Date/Time: 01/27/2015 / 09:30 **Date Received:** 01/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
Total Solids (%)	2.93	%	0.01	SM 2540 G-2011	01/29/2015	18:20	JI
Fecal Coliform	3,140,000	MPN/g	180	SM 9221 E+C-2006	01/27/2015	15:30	JI

Sample ID#: 0046365 **Sample Source:** Digester
Sample Date/Time: 01/27/2015 / 09:30 **Date Received:** 01/27/2015

Parameter	Results	Unit	Report Limit	Method	Analysis Date	Time	INIT
Total Solids (%)	1.79	%	0.01	SM 2540 G-2011	01/29/2015	18:22	JI
Fecal Coliform	218,000	MPN/g	180	SM 9221 E+C-2006	01/27/2015	15:45	JI

COMMENT:
Fecal and metals' results are reported on a dry weight basis.

REVIEWED IN ACCORDANCE

Environmental Systems Service, Ltd.

Analytical Report

Warrenton, Town of
Mr. Allen Chichester
P. O. Box 341
Warrenton, VA 20186

Report Date:	02/10/2015
Job #:	R000604
Customer #:	0000751
Customer PO #:	11578
Collected By:	Customer
Sample Location:	Quarterly Sludge Testing

001 Samples subcontracted to VELAP ID# 460014
574 Samples subcontracted to VELAP ID# 460160

SAMPLE CHAIN OF CUSTODY RECORD

Company Town of Warrenton
Contact Allen Chichester
Address P.O. Box 341
Address Warrenton, Virginia 22186
Phone (540) 347-1104; 3913 (fax)

ENVIRONMENTAL SYSTEMS SERVICE, LTD.

ESS
Environmental Systems Service Ltd
www.ess-services.com

218 North Main St
Post Office Box 520
Culpeper VA 22701
800-541-2116
540-825-6660 Fax: 540-825-4961

500 Stone St
Post Office Box 736
Bedford, VA 24523
540-586-5413
Fax 540-586-5530

Project Name/Site Quarterly Sludge Testing

P.O.# 11578

Sampled By: Jeff Iunnarell
(Print Name) (Signature)

ESS SAMPLE ID.	COLLECTION DATE	TIME	SAMPLE LOCATION	CONTAINERS SIZE	G/P	#	GRAB	COMP.	SAMPLE MATRIX	PRESERVATIVE	ANALYSES: pH 1	% Solids 1	NH3; TKN 2	NO2/NO3 2	metals* 3	Fecal 2	COMMENTS
463363	1-27-15	1010	Drying Bed	250ml	P	1		X	sludge	none	X	X					*As, Cd, Cr, Cu,
		1010	Drying Bed	250ml	P	1		X	sludge	none			X	X			Pb, Hg, Mo, Ni,
		1010	Drying Bed	250ml	P	1		X	sludge	none					X		Se, Zn
		1010	Drying Bed	125ml	P	1		X	sludge	Na Thios						X	
463364		0930	Thickener	250ml	P	1		X	sludge	none		X					
		0930	Thickener	125ml	P	1		X	sludge	Na Thios						X	
463365		0930	Digester	250ml	P	1		X	sludge	none		X					
	↓	0930	Digester	125ml	P	1		X	sludge	Na Thios						X	
																	Preservative
																	pH Check:

Relinquished by	Date	Time	Received by:	Relinquished by	Date	Time	Received by
	1/27/15	11:06	Alvin Beahm	Alvin Beahm	1-27-15	12:00	
Relinquished by	Date	Time	Received by:	Relinquished by	Date	Time	Received for Laboratory by
					1/27/15	1200	

Method of Delivery
☐ UPS ☐ Fed Ex ☒ Hand Delivery
☐ UPS Overnight ☐ Post Office

On Ice? (Y) N
Received @ 5.3 °C
☐ Under 2 hours

TAT
Normal ✓ Rush ____
Need Results by ____
Extra charges will apply for Rush TAT

W.O.# Rocclock
W O.# ____

Amt Paid $ ____
Check # ____

Sample Condition OK
Upon Receipt

Revised 03/04/09

VPDES PERMIT APPLICATION ADDENDUM

1. **Entity to whom the permit is to be issued:** Town of Warrenton
   Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** (Yes) No

3. **Please provide the tax map parcel number for the land where the discharge is located:** 6974-84-0739

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** .3 acres

5. **What is the design average flow of this facility in million gallons per day (MGD)?** 2.5 **(MGD) For industrial facilities, provide the maximum 30-day average production level, include units:** _____

6. **In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels?** Yes (No)
   If yes, please identify the other flow tiers in MGD: _____
   Please consider the following as you answer the questions in #5 above for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

7. **Nature of operations generating wastewater:** _____

   100 % of flow from domestic connections/sources

   Number of private residences to be served by the treatment works: 50 or more

   0 % of flow from non-domestic connections/sources

8. **Mode of discharge:** X Continuous _____ Intermittent _____ Seasonal

   Describe frequency and duration of intermittent and seasonal discharges: _____

9. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point(s):**

Stream Characteristic	**Outfall Number**						
Permanent stream, never dry	001						
Intermittent stream, usually flowing, sometimes dry							
Ephemeral stream, wet-weather flow, often dry							
Effluent-dependent stream, usually or always dry							
Lake or pond at or below discharge point							
Other:							

10. **Approval date(s), if applicable:**

O & M Manual Updated July 2011 **Sludge/Solids Management Plan** July 2002

Have there been changes in your operation or procedures since the above approval dates? Yes (No)

11. **Privately Owned Treatment Works:** If this application is for a privately owned treatment works serving, or designed to serve, 50 or more residences, you must include with your application notification from the State Corporation Commission that you are incorporated in the Commonwealth and verification from the SCC that you are in compliance with all regulations and relevant orders of the State Corporation Commission. Incorporated also includes Limited Liability Companies (LLCs), Limited Partnerships (LPs) and certificates of authority.

12. **Please provide a list of Materials stored at the facility. Please complete the table below or attach another page if more room is necessary.**

Material Storage		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures
Methanol	4,000 gal.	Concrete containment
Polyaluminum chloride	2,500 gal.	No containment
Diesel Fuel	3,500 gal.	Steel structure containment
Soda Ash	1,400 lbs.	Enclosed building
Praestol 857 Polymer	1,200 lbs.	Enclosed building

13. **Please provide the name and email addresses for personnel who will be involved with the reissuance of the VPDES permit:**

Name	Title	E-mail Address
Allen G. Chichester	Wastewater Superintendent	achichester@warrentonva.gov
Edward B. Tucker, Jr.	Director of Public Works & Util.	etucker@warrentonva.gov

14. **Consent to receive Electronic Mail**

The Department of Environmental Quality (DEQ) may deliver permits and certifications (this includes permit issuances, reissuances, modifications, revocation and reissuances, terminations and denials) to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check *only one* of the following to consent to or decline receipt of electronic mail from DEQ as follows:

☒ Applicant or permittee agrees to receive by electronic mail the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.

If yes, provide email: etucker@warrentonva.gov

☐ Applicant or permittee declines to receive by electronic mail the permit that may be issued for the proposed pollutant management activity.